

Measuring Transaction Productivity of Organizations: How To Assess Defense Agency Performance

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2002 Defense Economics Conference
Arlington, VA., February 14, 2002

Background

- **Starting in 1960's U.S.corporations create "Services Divisions."***
- **Starting in 1970's DoD creates "service" Agencies.**
- **Objectives:**
 - **Realize economies of scale;**
 - **Consolidate scarce resources;**
 - **Permit performance measurement.**

*** Strassmann, Managing the Costs of Information, Harvard Business Review, 9/1976**

How to Prove DoD Productivity Gains from Agencies?

	1990 Manning	2001 Manning
Army	1,200,000	61,000
Air Force	820,000	405,000
Navy	920,000	405,000
Marine Corps	205,000	198,000
Total Services	3,145,000	1,069,000
Total 14 Defense Agencies	100,000	200,000
Agency-to-Services Ratios	31.5	5.3

Note: Manning approximate, scaled from IDA graphics

Performance Results Act Requires Measurement

- **Sect 1115;(6): Describe the means to be used to verify and validate measured values.**
- **Sect 1116; (2): 'Outcome measure' means an assessment of the results of a program activity compared to its intended purpose;**
- **Sect 1116; (5): 'Performance indicator' means a particular value or characteristic used to measure output or outcome;**

Why Total Performance Measurement is Important

- **The CORM also observed that 21,000 are employed by Defense Agencies to administer the Department's contracts with industry. Such administration was estimated to increase the cost of products by 18% .***

* Commission on Roles and Missions (CORM), 1994

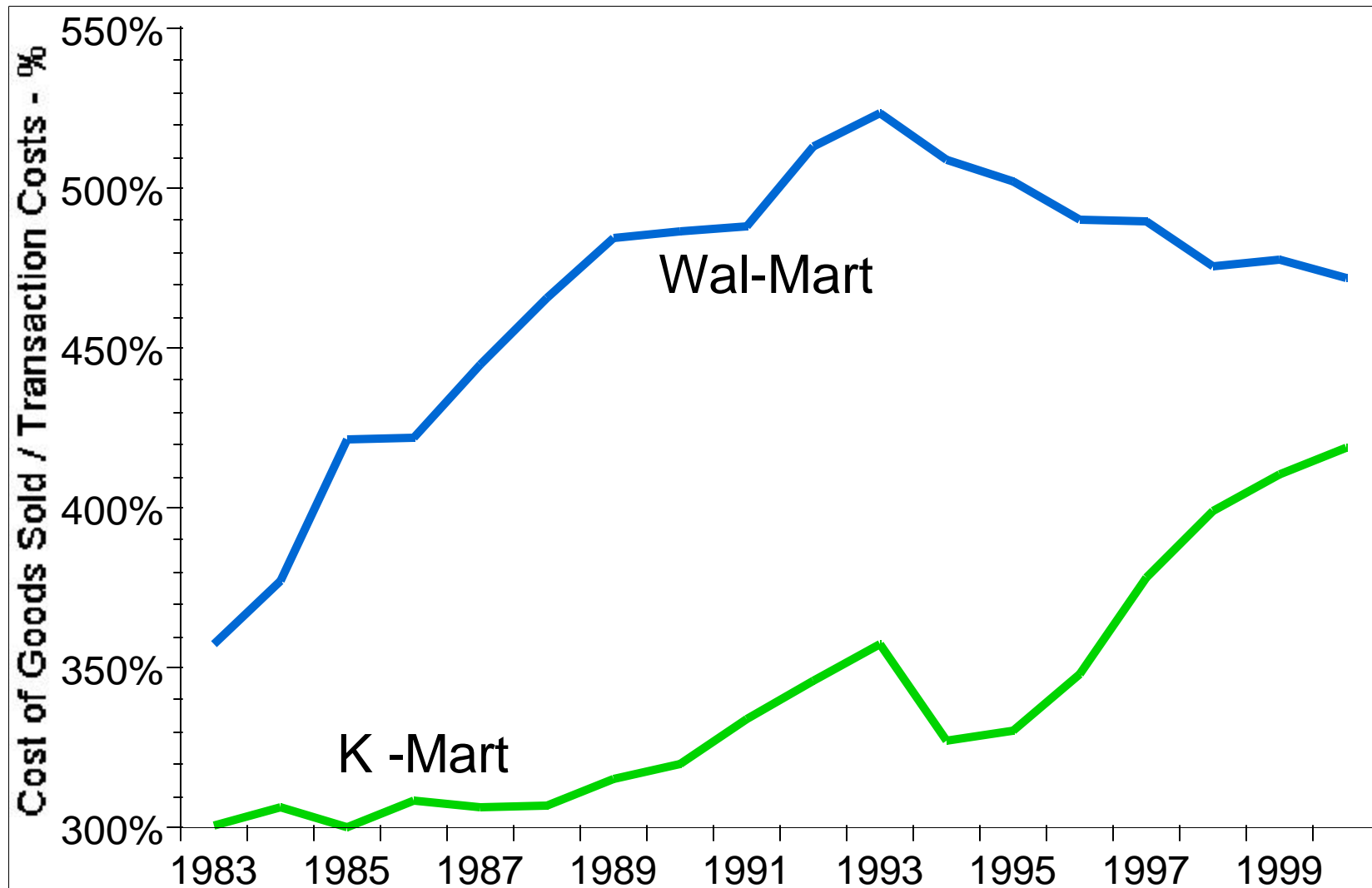
Proposed Measure of Productivity

$$\text{Transaction Productivity} = \frac{\text{Output}}{\text{Input}}$$

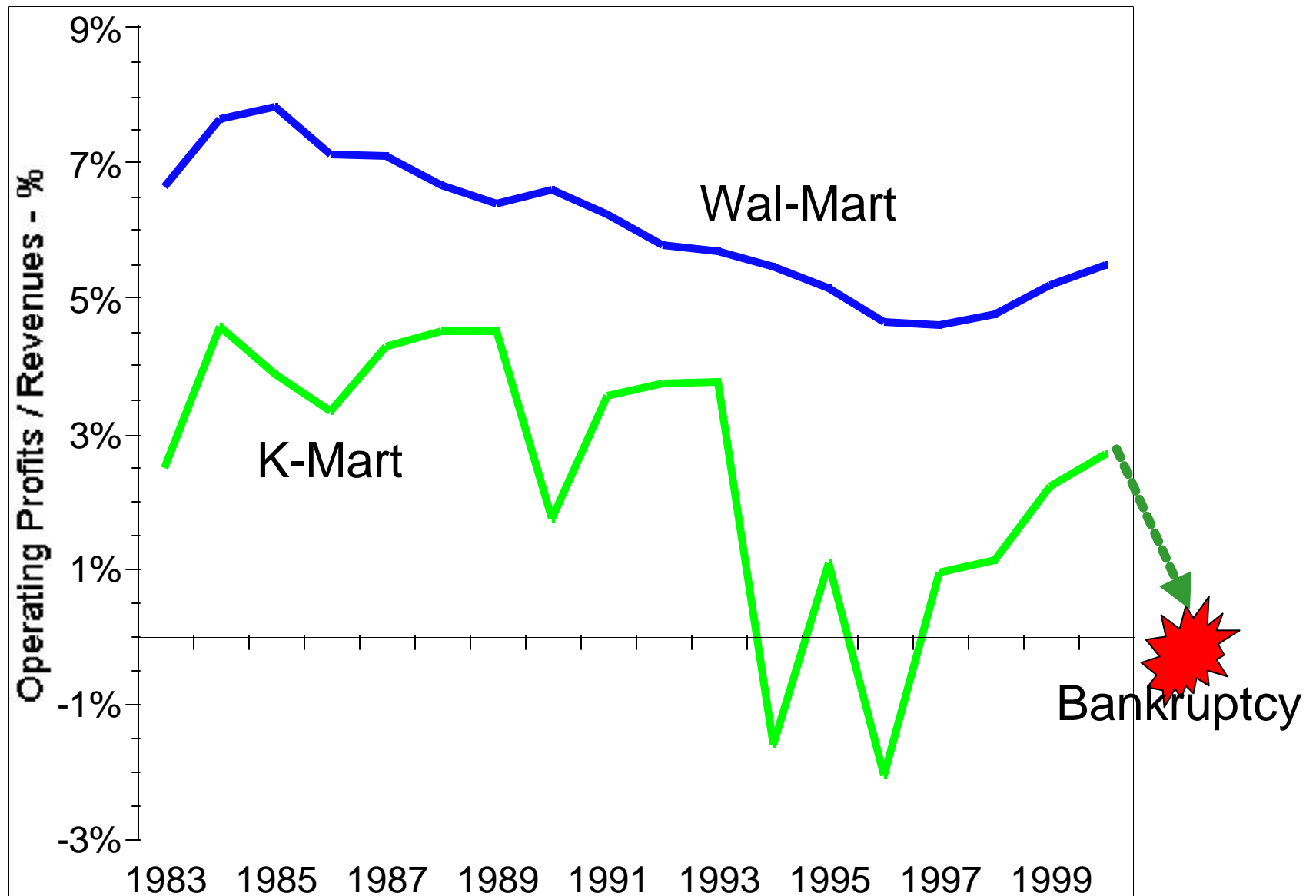
$$\text{TP} = \frac{\text{Cost of Goods}}{\text{Cost of Transactions}}$$

Note: ® Information Productivity is a Registered Trademark of Strassmann, Inc.

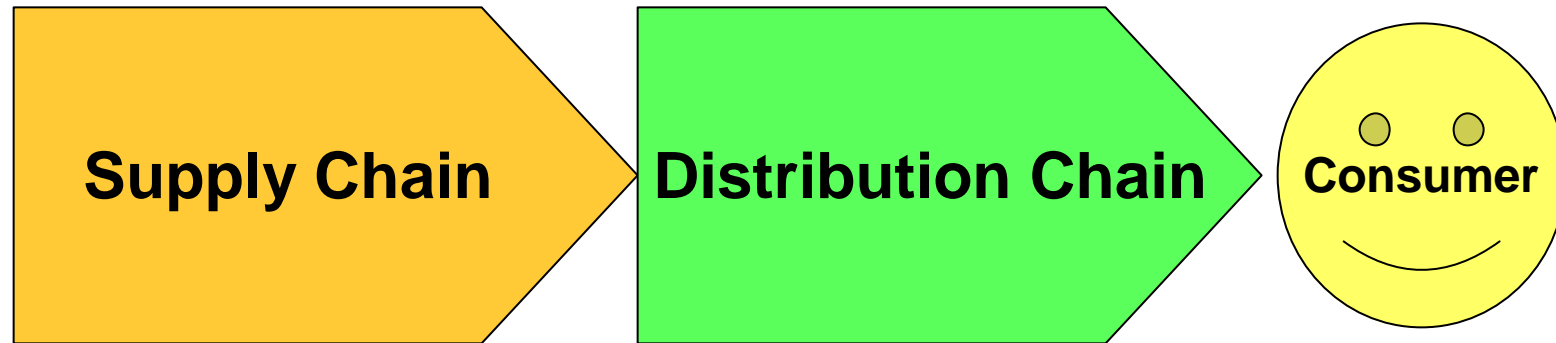
Competition Among Firms with Different Productivity



Operating Results for Firms with Different Productivity



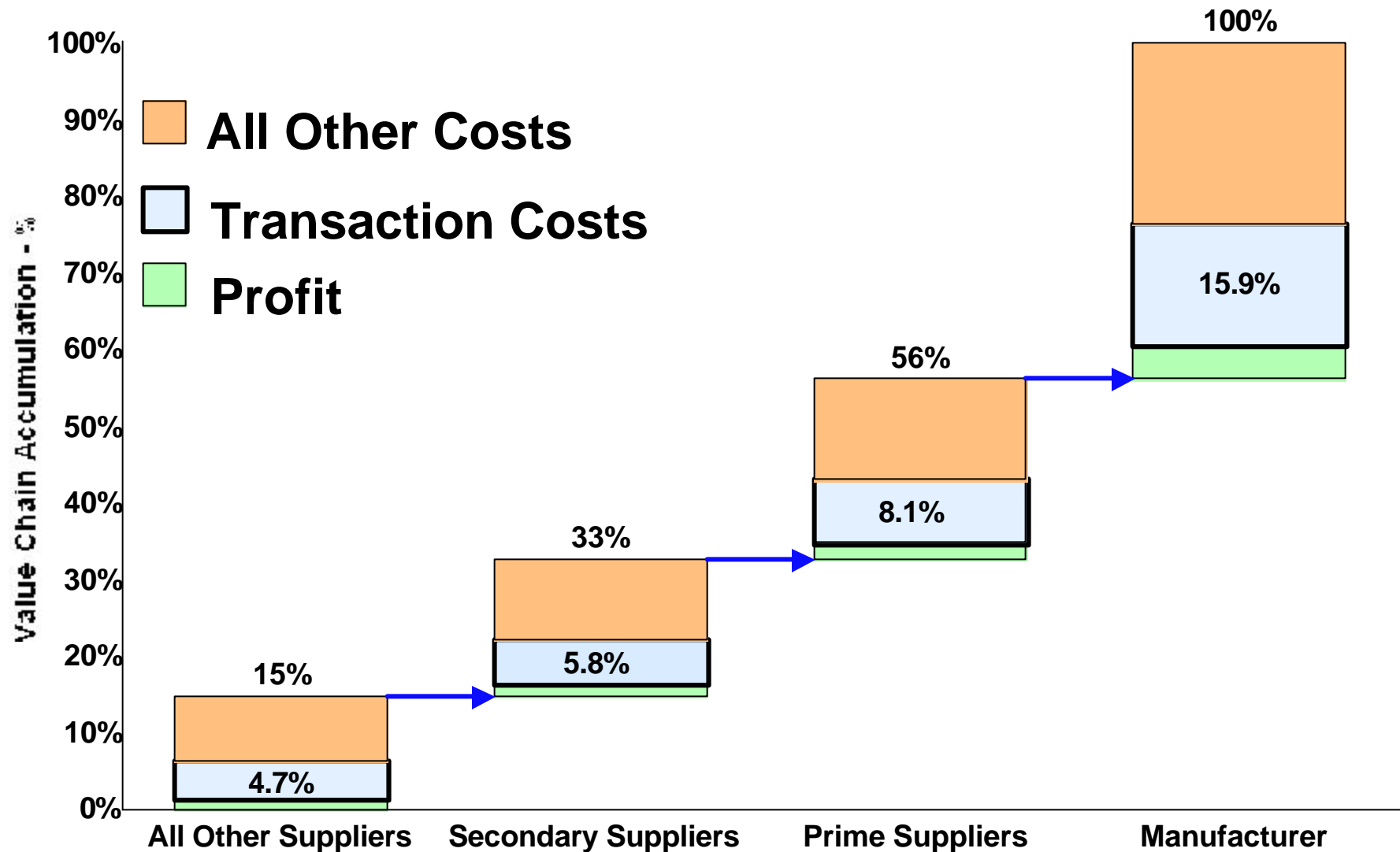
How to Measure Transaction Costs in the Value Chain



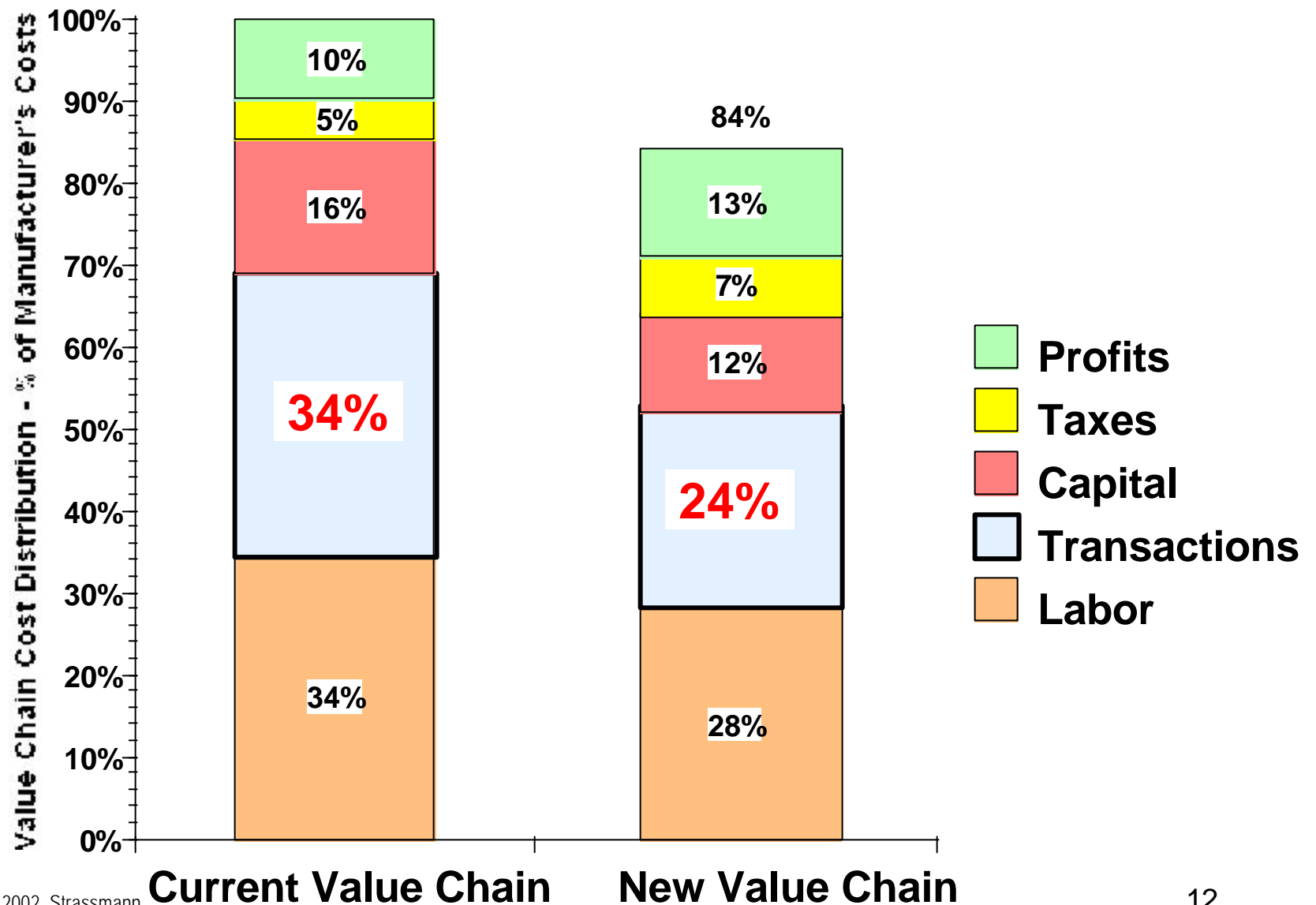
Costs in a Supply Chain – General Motors Case



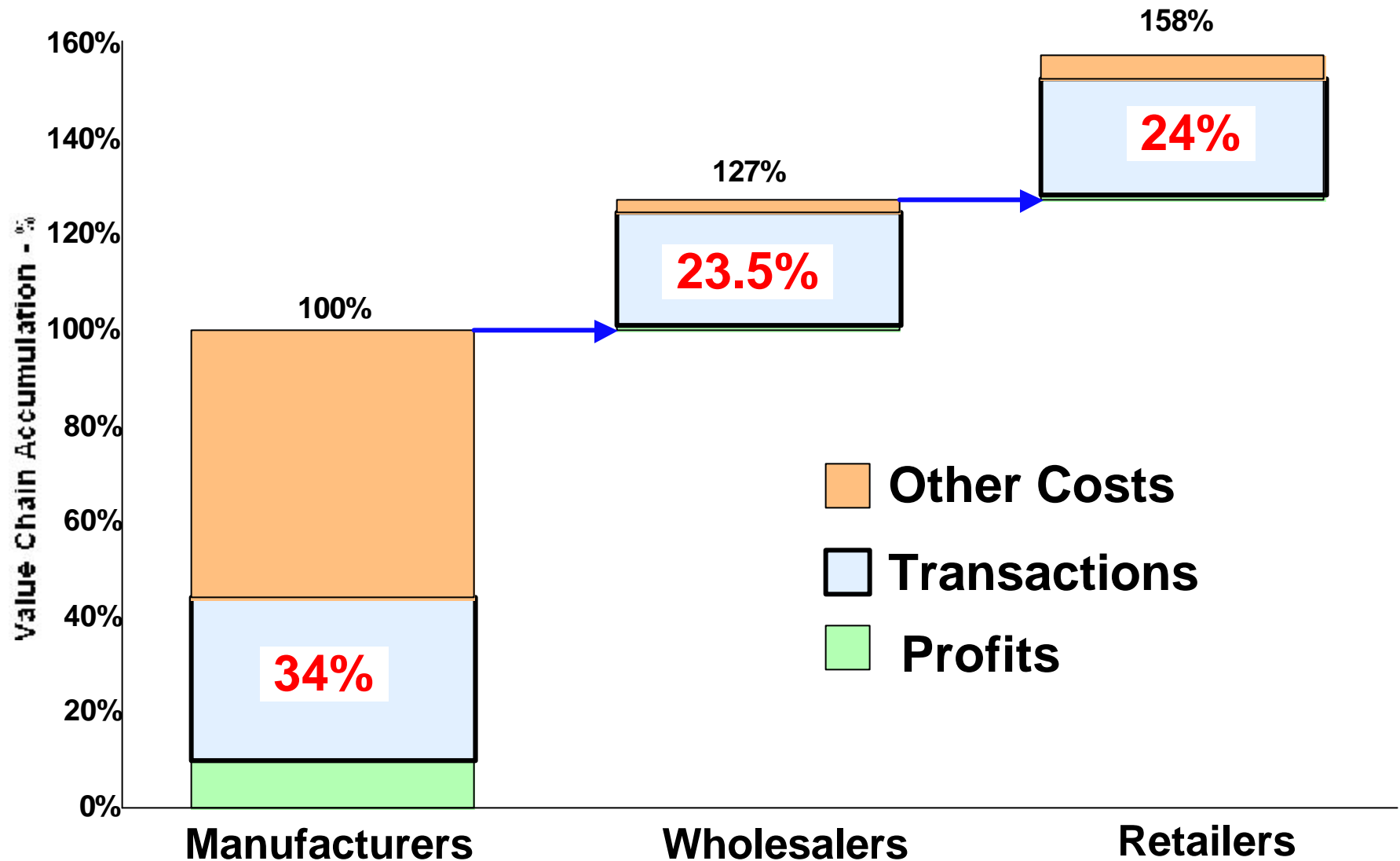
Costs in a Supply Chain – General Motors Case



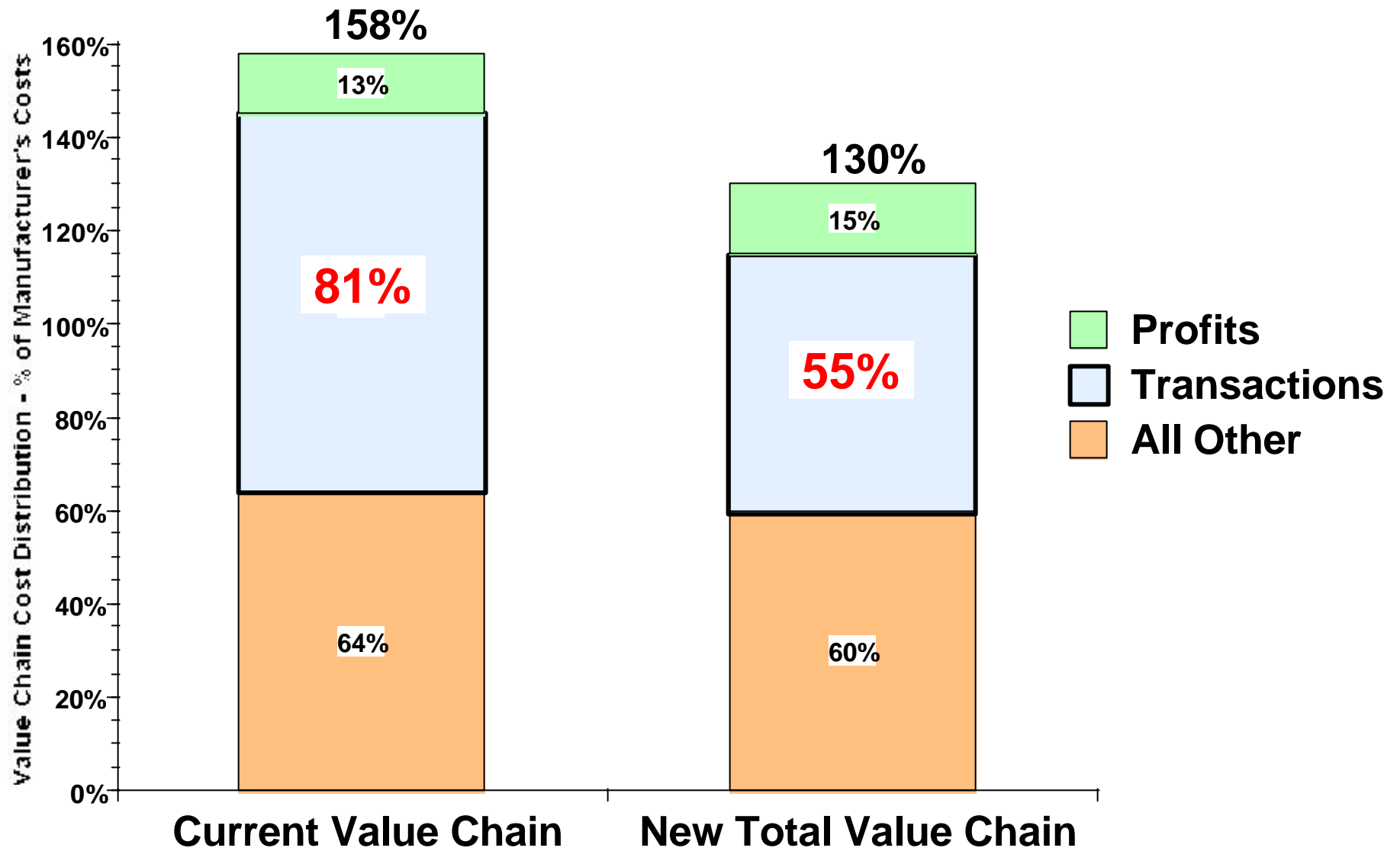
Potential Supply Chain Gains – Best e-Commerce Case



The Total Value Chain – Consumer Goods



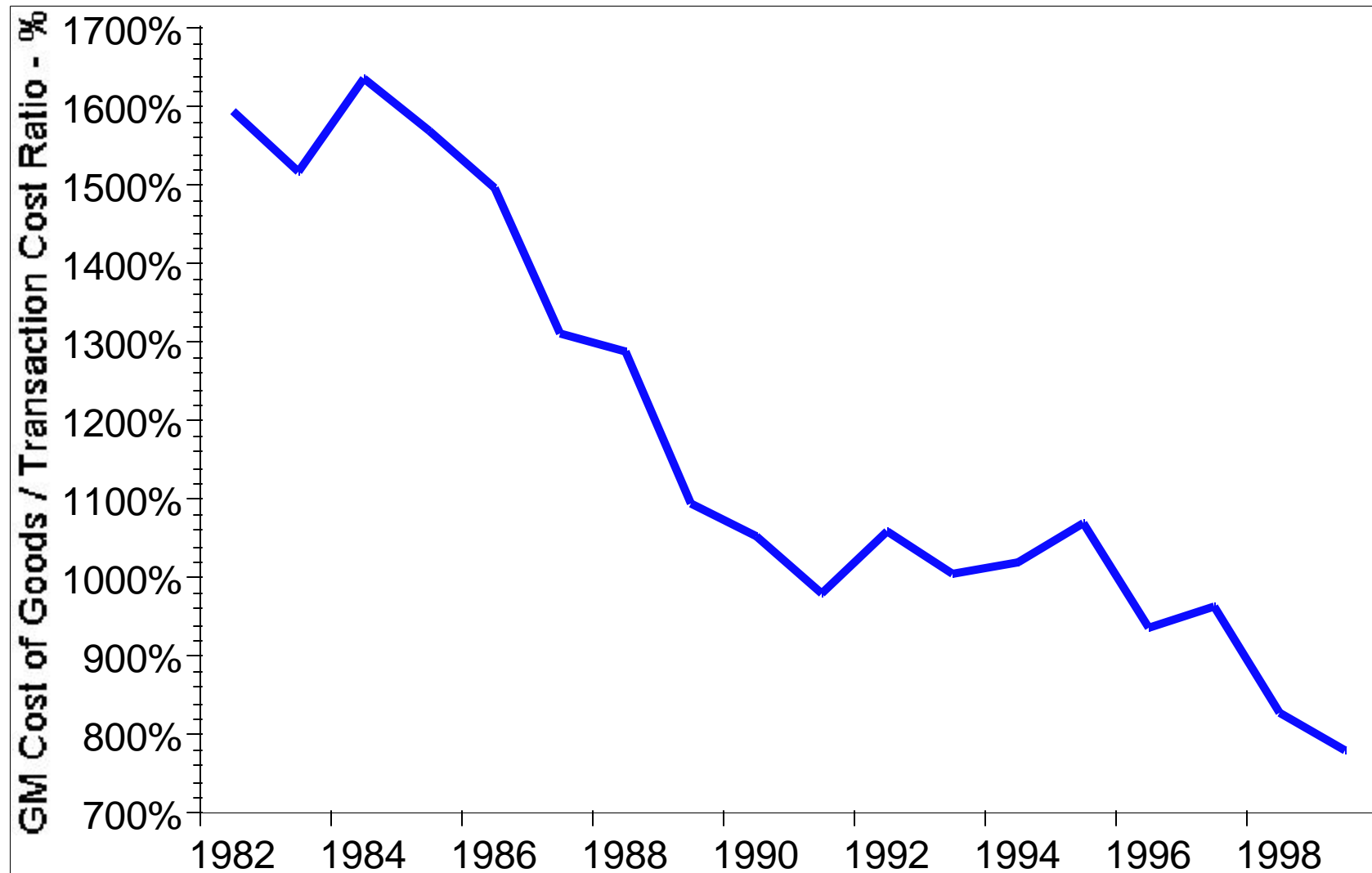
Potential Total Gains for Consumer Goods



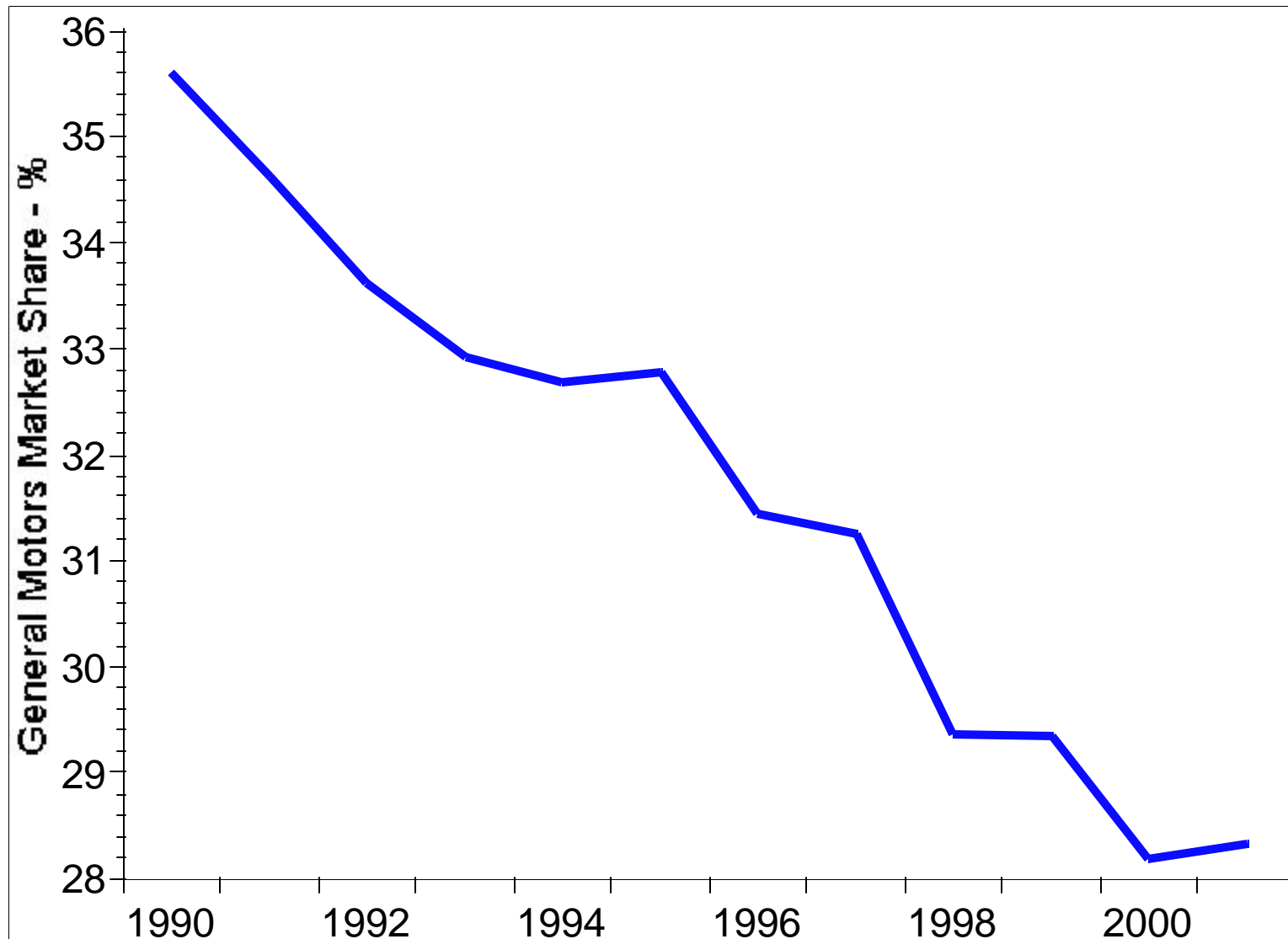
Different Measures of Transaction Productivity

	Cost of Goods	Transaction Costs	Transaction Productivity
Corporate (Agency) Case	79%	16%	497%
Supply Chain Case	34%	34%	100%
Supply + Distribution Chain Case	64%	81%	79%

Case: GM Cost of Goods per Transaction \$'s Declined



Case: GM Market Share Declined with Decline in Productivity



Summary

- ***Transaction Productivity* can be used to measure DoD Agency performance.**